

Amendment to the Claims

Please amend the claims as follows:

1. (Original) A faucet comprising:

a spout;

a passageway that conducts water flow through the spout;

a electrically operable valve disposed within the passageway;

a manual valve disposed within the passageway in series with the electrically operable valve;

a manual handle that controls the manual valve; and

a capacitive touch control that is positioned in the spout, where the capacitive touch control toggles the electrically operable valve.

2. (Currently Amended) The faucet of Claim 1, further comprising a logical control that toggles the electrically operable valve when the touch control is touched and released within a period of time shorter than a predetermined threshold, but which does not toggle the electrically operable valve when the touch control is touched for a period longer than the predetermined threshold.

3. (Original) The faucet of Claim 2, wherein the logical control toggles the electrically operable valve when the touch control is touched and released within a period of time between a predetermined lower bound and a predetermined upper threshold.

4. (Original) The faucet of Claim 3, wherein the predetermined lower bound is about 50ms, and the predetermined upper threshold is about 250ms.

5. (Original) The faucet of Claim 1, wherein the electrically operable valve is a magnetically latching valve.

6. (Original) The faucet of Claim 1, further comprising a proximity sensor that is sensitive to motion of objects within a detection zone of the proximity sensor.

7. (Original) The faucet of Claim 6, wherein the faucet has:
a manual mode, wherein the proximity sensor is inactive; and
a hands-free mode, wherein water flow is toggled on and off in response to the proximity sensor.

8. (Original) The faucet of Claim 1, further comprising a second capacitive touch control disposed within the manual handle that toggles the electrically operable valve.

9. (Currently Amended) A faucet comprising:
a spout;
a passageway that conducts water flow through the spout;
an electrically operable valve disposed within the passageway and having an opened position, in which water is free to flow through the passageway, and a closed position, in which the passageway is blocked;
a manual valve disposed within the passageway in series with the electrically operable valve;
a manual handle that controls the manual valve;

a first capacitive touch-control that is positioned in the spout and that generates a first output signal while the first capacitive touch-control is in contact with a user;

a second capacitive touch-control that is positioned in the manual handle and that generates a second output signal while the second capacitive touch-control is in contact with [[a]] the user;

a logical control that receives the first and second output signals, and which toggles the electrically operable valve between the opened position and the closed position when [[an]] either the first output signal or the second output signal begins and ends within a period of time between a predetermined lower bound and a predetermined upper threshold bound; and

a proximity sensor that is sensitive to motion of objects within a detection zone of the proximity sensor;

wherein the faucet has a manual mode, wherein the proximity sensor is inactive, and a hands-free mode, wherein the magnetically latching valve is toggled between its the opened position and closed positions position in response to the proximity sensor, subject to being overridden overridden by the output signal and logical control.

10. (Currently Amended) A faucet comprising:

a spout;

a passageway that conducts water flow through the spout;

an electrically operable valve disposed within the passageway;

a sensor operably connected to the electrically operable valve via a logical control, the logical control generating a control signal when the sensor observes senses an activation event having a duration less than a predetermined threshold; and

wherein the electrically operable valve actuates in response to the control signal.

11. (Original) The faucet of Claim 10, wherein the sensor is a touch sensor, and the activation event is contact with the touch sensor.

12. (Currently Amended) The faucet of Claim [[11]] 10, wherein the electrically operable valve is a magnetically latching valve.

13. (Currently Amended) The faucet of Claim 10, further comprising a proximity sensor that produces a proximity sensor output signal corresponding to motion of one or more objects within a detection zone of the proximity sensor.

14. (Currently Amended) The faucet of Claim 13, wherein the faucet has:
a manual mode, wherein the proximity sensor is inactive; and
a hands-free mode, wherein water flow is toggled on and off in response to the proximity sensor output signal.

15. (Currently Amended) The faucet of Claim 10, further comprising a second electrically operable valve having a plurality of partially closed positions, the second electrically operable valve being disposed in the passageway upstream of a mixing point, such that the second electrically operable valve affects the flow rate of only one of a hot or cold water supply.

16. (Currently Amended) The faucet of Claim 15, wherein the logical control directs the second electrically operable valve to change among open, closed, and the plurality of partially closed positions in response to a duration of contact with the touch control.

17. (Currently Amended) A fluid flow control for a faucet having an electrically operable valve that is actuated in response to a control signal, the fluid flow control comprising:
~~a sensor operably connectable to an electrically operable valve that detects activation events;~~
~~a logical control operably connected to in communication with~~ the sensor, the logical control generating a control signal when the sensor observes an activation event occurring less than a predetermined number of times within a predetermined period, but which does not generate the control signal when the sensor observes an activation event occurring more than the predetermined number of times within a predetermined period.

18. (Currently Amended) A fluid flow control for a faucet having an electrically operable valve that is actuated in response to a control signal, the fluid control comprising:
~~a sensor operably connectable to an electrically operable valve that observes activation events;~~
a logical control operably connected to the sensor, the logical control generating a control signal when the sensor observes an activation event having a duration less than a predetermined threshold, but which does not generate the control signal when the touch control is touched for a period longer than the predetermined threshold.

19. (Currently Amended) The ~~capacitive touch control~~ fluid flow control of Claim 18, ~~further comprising wherein the sensor~~ is a proximity sensor that is sensitive to motion of objects within a detection zone of the proximity sensor.

20. (Currently Amended) The ~~capacitive touch control~~ fluid flow control of Claim 19, wherein the predetermined lower bound is about 50ms and the predetermined upper threshold is about 250ms.

21. (New) The fluid flow control of Claim 18, wherein the sensor is a capacitive touch sensor.